UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,483	09/16/2003	Shinichi Kikuchi	008312-0305984	9626

909 7590 10/09/2007

PILLSBURY WINTHROP SHAW PITTMAN, LLP
Eric S. Cherry - Docketing Supervisor
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER	
SAUNDERS JR, JOSEPH	
ART UNIT	PAPER NUMBER
2615	

MAIL DATE	DELIVERY MODE
10/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/662,483	KIKUCHI ET AL.	
	Examiner	Art Unit	
	Joseph Saunders	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 9-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 9-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the communications filed July 9, 2007. Claims 1 – 4 and 9 – 12 are currently pending and considered below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 – 4 and 9 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US 6,795,383 B1), hereinafter Yamamoto, in view of Oki (US 6,873,274 B2), hereinafter Oki.

Claims 1 and 9: Yamamoto discloses an information recording apparatus and method comprising: an input unit configured to input data (input section 2603); a detection unit configured to detect audio attribute information from input data input by the input unit (system controller 2602); and a recording unit configured to record audio information and the audio attribute information contained in the input data in a predetermined format (drive 2608) (Column 24 Lines 5 – 54, Figure 14 and 17). Yamamoto does not disclose wherein the detection unit detects, on the basis of a master clock, a length of a first half period of an LR clock contained in the input data and a length of a second half period which follows the first half period, compares the lengths of the first and second half

periods to check the difference in the lengths of the first and second half periods, and detects information associated with a sampling frequency corresponding to the audio attribute information on the basis of the difference in the lengths of the first half period and the second half period.

Oki discloses an apparatus and method for detecting a sampling frequency of a digital signal on the basis of a plurality of clocks (Figures 1 – 5). Oki teaches that the fs detection means 8 receives at a counter the sampling clock LRCK and the master clock xfso and uses the master clock as a count clock. "The counter 31 measure the period during which the input sampling clock LRCK is at a high level, that is, the semi-period of the input sampling clock. If the falling edge of the input sampling clock LRCK is detected, the latch 32 latches the current count value that is output from the counter 31. When the input sampling clock is at a low level, the counter 31 is reset and the latched count value is output to the count value analysis decoder 33 where decoding is done in such a manner as shown in FIG. 5," Column 6 Line 64 – Column 7 Line 9. Oki further teaches comparing the lengths of the first and second half periods (comparator 42), using information found in Figure 5, for detecting a change in sampling frequency (period counter 43) resulting in a fs change detection signal (Figure 6). The process disclosed by Oki would be beneficial in the case where the signal has not been encoded with sampling frequency attribute information. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the sampling frequency detection means 8 disclosed by Oki in the apparatus of Yamamoto, since the detection means 8 of Oki allows for the sampling frequency of a digital signal to be determined

without prior knowledge of the sampling frequency whereas Yamamoto must detect the sampling frequency from stored bits in an attribute table.

Claims 2 and 10: Yamamoto and Oki disclose the recording apparatus and method of claims 1 and 9, and Yamamoto further discloses wherein the predetermined format contains a management file ("An AR_MANGR.IFO file 20 is recorded as the management information file. The file 20 stores management information for controlling the reproduction of the AV file.") and an audio file ("AR_AUDIO.ARO in which the audio are recorded"), the management file contains the audio attribute information ("Management information referred to as RTR_AMG (real time recording audio management) is recorded in the AR_MANGE.IFO file. The RTR_AMG comprises six tables of RTR_AMGI, A_AVFIT, ORG_PGCI, UD_PGCIT, TXTDT_MG and MNFIT." "A_AVFIT stores attribute information related to a coding mode, an audio file, a still picture file or the like."), and the audio file contains the audio information (Column 8 Lines 5 – 25, Column 13 – Lines 50 – 60, and Figures 4, 5, 18, and 25).

Claims 3 and 11: Yamamoto and Oki disclose the recording apparatus and method of claims 1 and 9, and Yamamoto further discloses wherein the predetermined format contains a management file ("An AR_MANGR.IFO file 20 is recorded as the management information file. The file 20 stores management information for controlling the reproduction of the AV file.") and an audio file ("AR_AUDIO.ARO in which the audio are recorded"), the management file contains stream information ("Management

information referred to as RTR_AMG (real time recording audio management) is recorded in the AR_MANGE.IFO file. The RTR_AMG comprises six tables of RTR_AMGI, A_AVFIT, ORG_PGCI, UD_PGCIT, TXTDT_MG and MNFIT." "A_AVFIT stores attribute information related to a coding mode, an audio file, a still picture file or the like."), the stream information contains the audio attribute information ("AUD_STI indicates the attribute of a stream included in the AOB composing the audio file"), and the audio file contains the audio information (Column 8 Lines 5 – 25, Column 13 – Lines 50 – 60, Column 15 Lines 45 – 55, Column 16 Lines 22 – 40, and Figures 4, 5, 18, and 25).

Claims 4 and 12: Yamamoto and Oki disclose the recording apparatus and method of claims 1 and 9, and Yamamoto further discloses wherein the predetermined format contains a management file ("An AR_MANGR.IFO file 20 is recorded as the management information file. The file 20 stores management information for controlling the reproduction of the AV file.") and an audio file ("AR_AUDIO.ARO in which the audio are recorded"), the management file contains management information ("Management information referred to as RTR_AMG (real time recording audio management) is recorded in the AR_MANGE.IFO file. The RTR_AMG comprises six tables of RTR_AMGI, A_AVFIT, ORG_PGCI, UD_PGCIT, TXTDT_MG and MNFIT." "A_AVFIT stores attribute information related to a coding mode, an audio file, a still picture file or the like."), the audio file contains a pack ("The pack 33 for storing the audio elementary stream will be referred to as "A_PCK (audio pack)"") as a data transfer processing unit,

and the pack contains the audio attribute information and the audio information (Column 8 Lines 5 – 25 and 50 – 64, Column 13 – Lines 50 – 60, and Figures 4, 5, 6,18, and 25).

Response to Arguments

4. Applicant's arguments filed July 9, 2007 have been fully considered but they are not persuasive. Oki teaches "detecting (estimating) a sampling frequency on the basis of input data whose sampling frequency is unknown," hence "a detector for detecting an input sampling frequency of digital data," Abstract of Oki. If the sampling frequency were known as applicant alleges, then Oki would not need to "detect" the sampling frequency by using different clock signals. Since Oki has the benefit of detecting a sampling frequency, it would be beneficial to combine this teaching with the system of Yamamoto, where the sampling frequency is necessary in order to record the optical disk in compliance with the given standard. Oki also discloses the limitation of comparing the lengths of the first and second half periods to determine a change in the sampling frequency (Figure 6). Therefore the system of Yamamoto and Oki disclose all the limitations of the claimed invention.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571) 270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS
September 29, 2007

SINH TRAN
SUPERVISORY PATENT EXAMINER